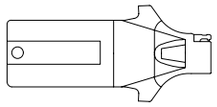
E-SERIES TRAILER TOW WIRING

ELECTRONIC BRAKE CIRCUITS

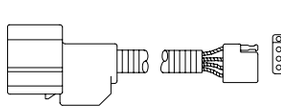
			RECOMMENDED MAX ALLOWABLE		
			WIRE LENGTH (feet)		
CRKT. COLOR	CODE	DESCRIPTION	14 AWG	12 AWG	10 AWG
Dark Blue	DB	Trailer Electric Brake	50	50	50
Orange	OG	Trailer Battery Feed	N/A	20	20
Yellow	YE	Trailer LH Turn/Stop Lamp	50	50	50
Dark Green	DG	Trailer RH Turn/Stop Lamp	50	50	50
White	WH	Trailer Ground	N/A	N/A	10 GA only
Brown-White	BR-WH	Trailer Run Lamps	50	50	50
Black-Light Green	BK-LG	Trailer Back-Up Lamps	50	50	50

CLASS II to CLASS I
PART # F4TB 12964 A



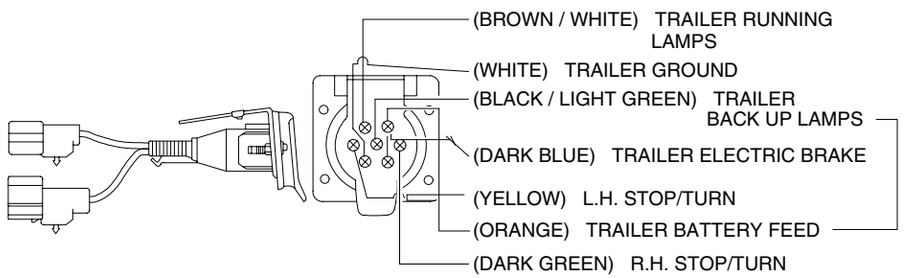
(WHITE) GROUND
(BROWN / WHITE) RUNNING LAMPS
(YELLOW) L.H. STOP/TURN
(DARK GREEN) R.H. STOP/TURN

CLASS I
PART # F7UB 13A576 A

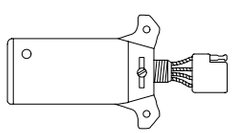


(WHITE) GROUND
(BROWN / WHITE) RUNNING LAMPS
(YELLOW) L.H. STOP/TURN
(DARK GREEN) R.H. STOP/TURN

CLASS II WITH PIN TERMINALS
PART # F7UB 14A678 C


(BROWN / WHITE) TRAILER RUNNING LAMPS
(WHITE) TRAILER GROUND
(BLACK / LIGHT GREEN) TRAILER BACK UP LAMPS
(DARK BLUE) TRAILER ELECTRIC BRAKE
(YELLOW) L.H. STOP/TURN
(ORANGE) TRAILER BATTERY FEED
(DARK GREEN) R.H. STOP/TURN

CLASS II WITH PIN TERMINALS TO CLASS I
PART # F2TB 13A576 AA



(WHITE) GROUND
(BROWN / WHITE) RUNNING LAMPS
(YELLOW) L.H. STOP/TURN
(DARK GREEN) R.H. STOP /TURN

FORD SERVICE ALTERNATIVES AVAILABLE AT YOUR FORD DEALER (NOT SUPPLIED WITH TRAILER KIT)

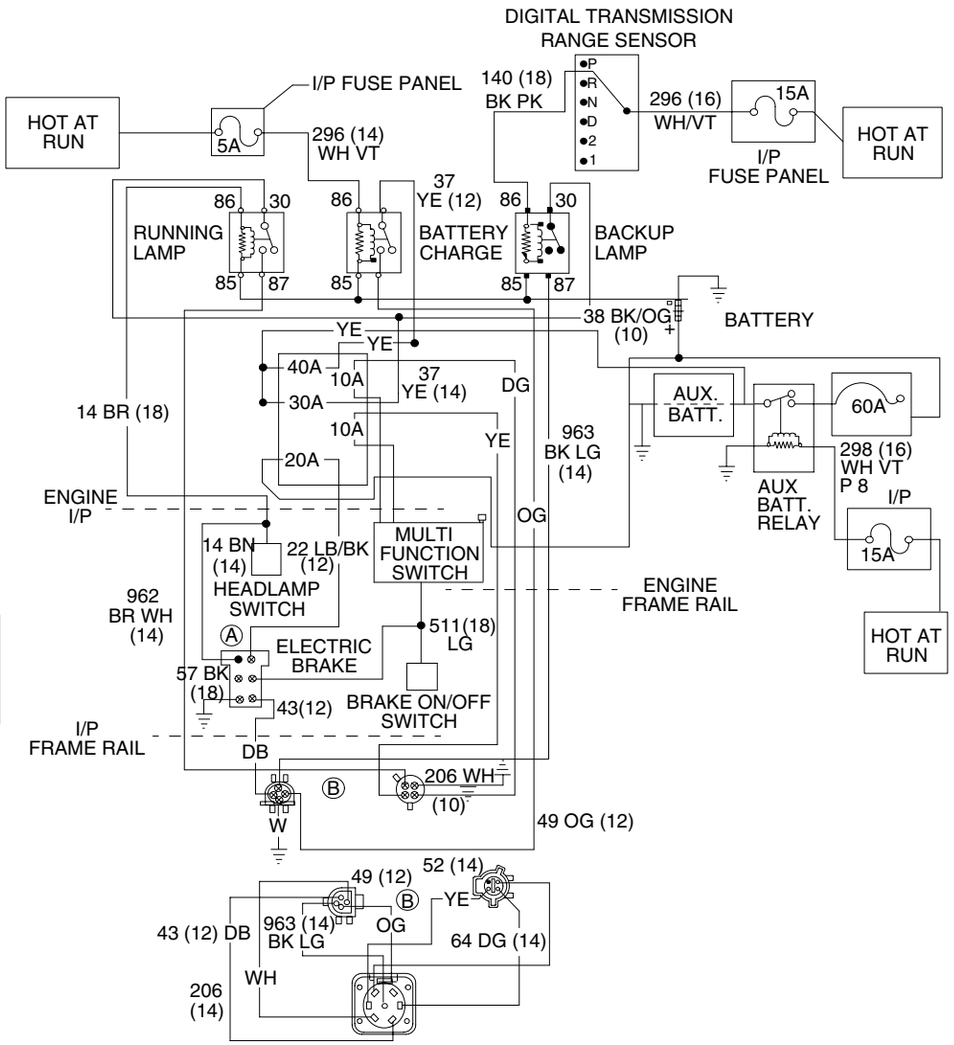
BB0122 2003

ELECTRONIC BRAKE CIRCUITS

Dark Blue	DB	Trailer Electric Brake
Brown	BR	Vehicle Tail Lamp and Marker Lamp
Red	RD	Vehicle Control Feed
Light Green	LG	Vehicle Brake Signal
White	WH	Trailer Ground

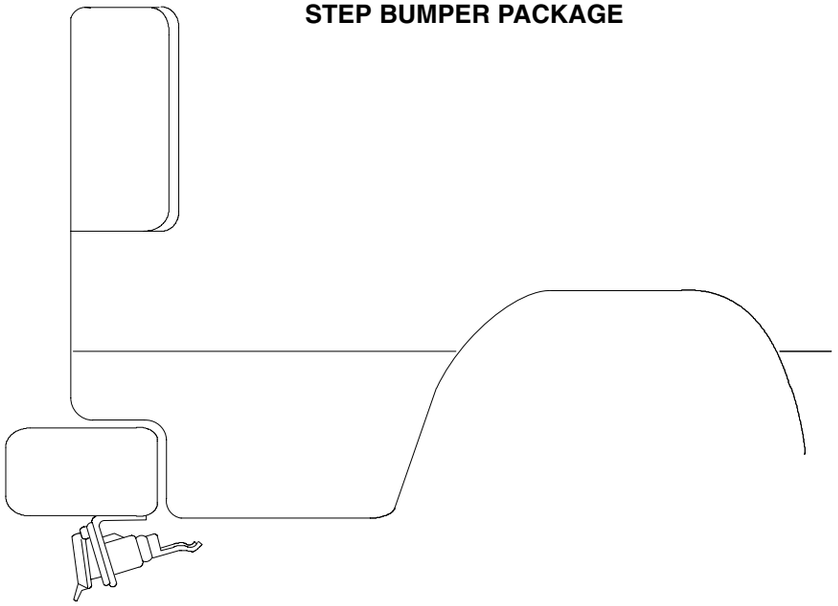
VEHICLE CIRCUIT

Orange-Light Blue	OG-LB	Vehicle RH Rear Turn Signal
Light Green-Orange	LG-OG	Vehicle LH Rear Turn Signal
Black-Pink	BK-PK	Vehicle Back-Up Lamp Feed
Yellow	YE	Vehicle Battery Feed
White-Purple	WH-PR	Vehicle Fuse Accessory Feed
White-Light Green	WH-LG	Vehicle Tail and Marker Lamp



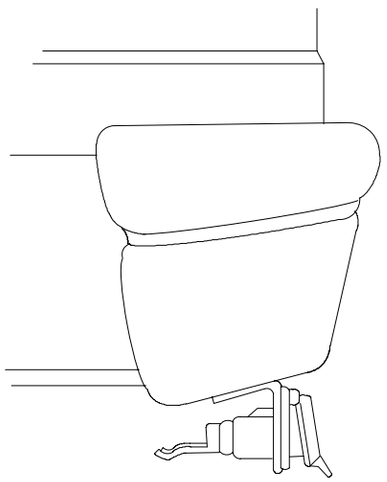
E-SERIES TRAILER TOW WIRING

STEP BUMPER PACKAGE

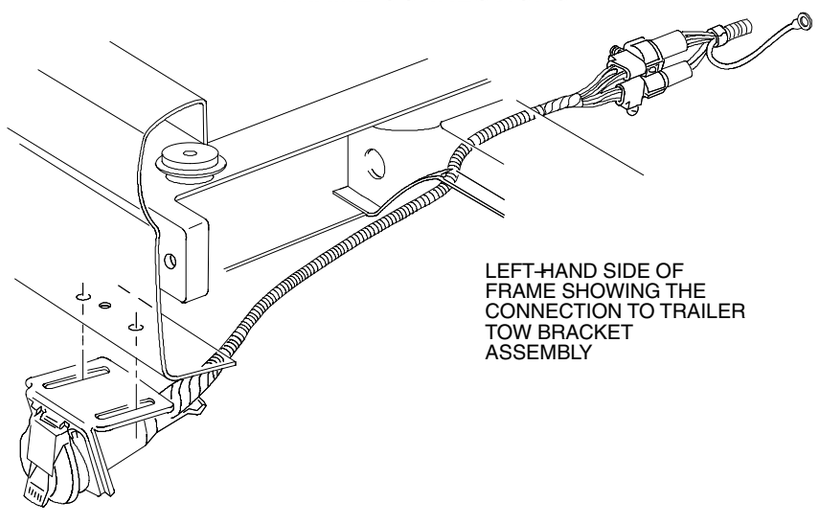


SLIDE TRAILER TOW BRACKET ASSEMBLY TO THE MOST FORWARD POSITION IN VEHICLE. FAILURE TO DO SO MAY RESULT IN BRACKET DAMAGE. THIS APPLIES TO VEHICLES WITH OR WITHOUT A HITCH. THIS NOTE APPLIES TO BOTH THE CONTOUR AND STEP BUMPER PACKAGES.

CONTOUR BUMPER PACKAGE



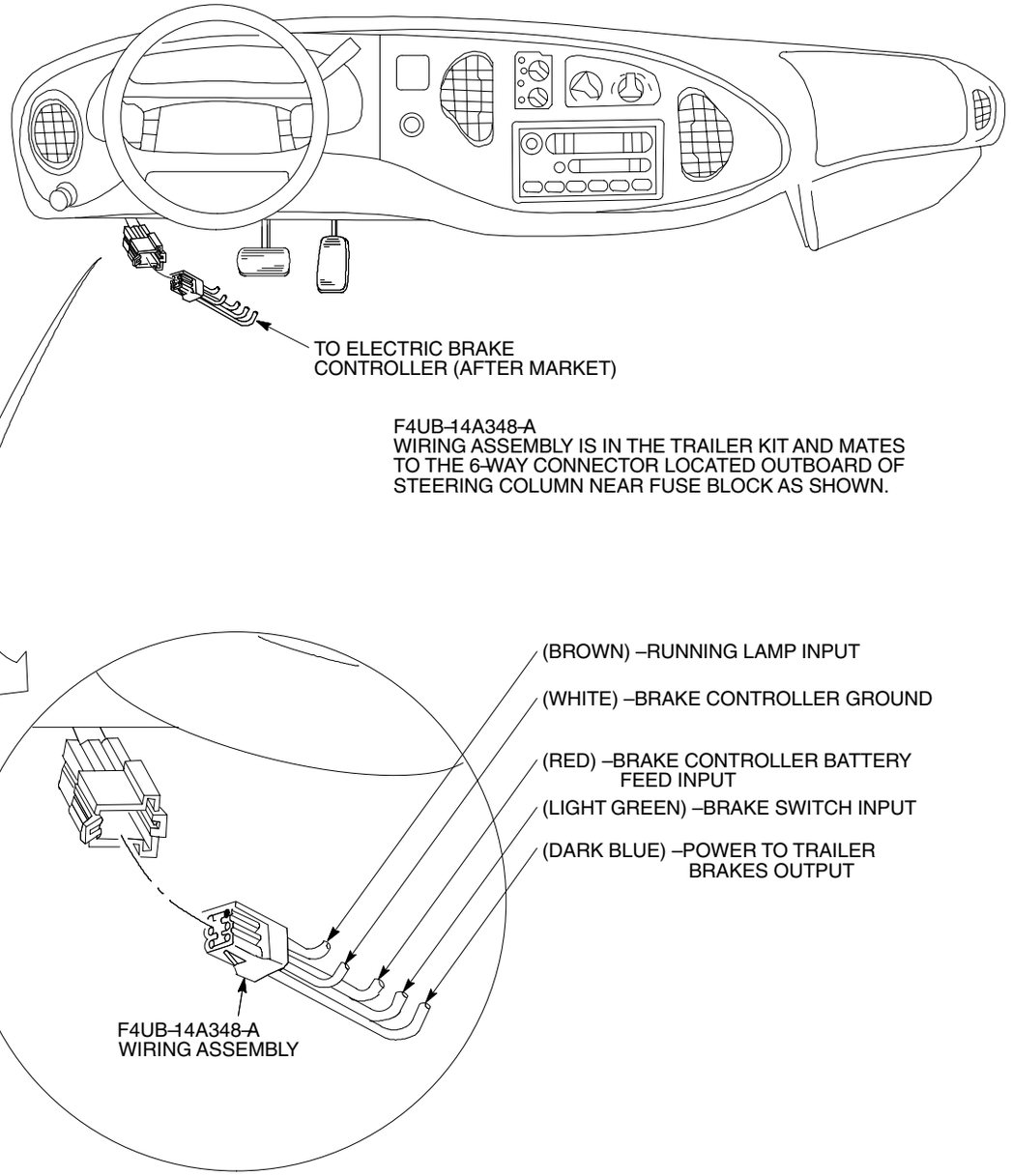
FRAME CONNECTIONS



LEFT-HAND SIDE OF FRAME SHOWING THE CONNECTION TO TRAILER TOW BRACKET ASSEMBLY

CHECK TRAILER LIGHTS AFTER INSTALLATION TO DETERMINE IF THEY FUNCTION CORRECTLY.
DO NOT OPERATE THE VEHICLE WITH A TRAILER IF A PROBLEM EXISTS.

ELECTRIC BRAKE CONTROL

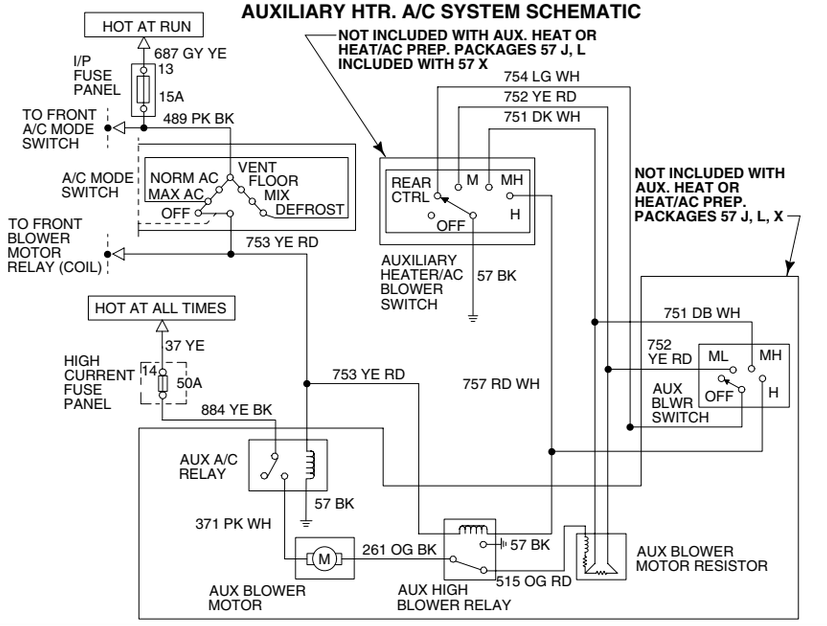

TO ELECTRIC BRAKE CONTROLLER (AFTER MARKET)
(BROWN) –RUNNING LAMP INPUT
(WHITE) –BRAKE CONTROLLER GROUND
(RED) –BRAKE CONTROLLER BATTERY FEED INPUT
(LIGHT GREEN) –BRAKE SWITCH INPUT
(DARK BLUE) –POWER TO TRAILER BRAKES OUTPUT
F4UB-14A348-A WIRING ASSEMBLY

F4UB-14A348-A
WIRING ASSEMBLY IS IN THE TRAILER KIT AND MATES TO THE 6-WAY CONNECTOR LOCATED OUTBOARD OF STEERING COLUMN NEAR FUSE BLOCK AS SHOWN.

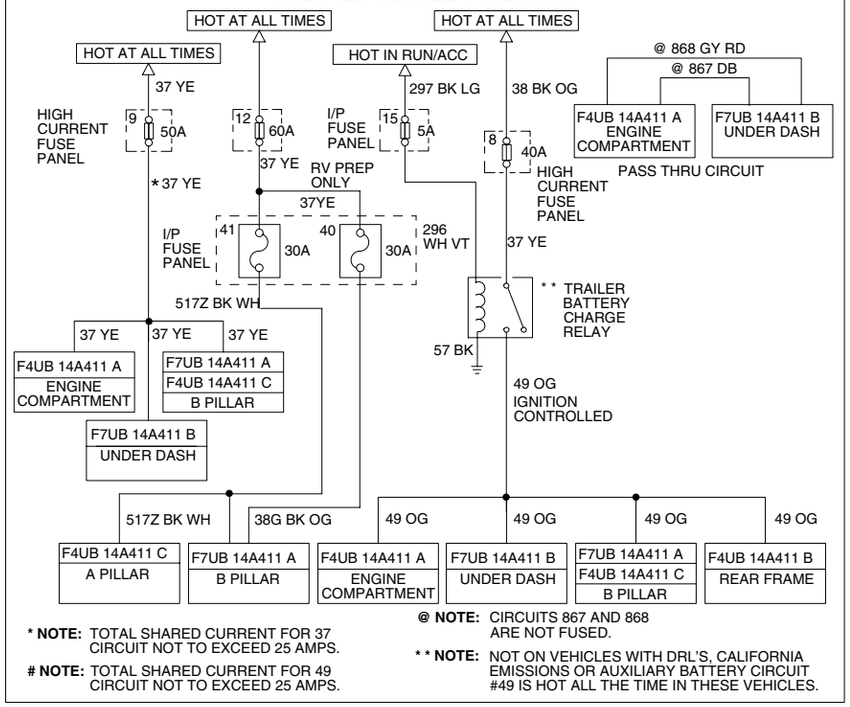
THE BRAKE CONTROLLER BATTERY FEED INPUT IS FUSED TO 30A IN THE ENGINE COMPARTMENT'S DISTRIBUTION BOX.

E-SERIES TRAILER LAMP PLUG AND WIRING

AUXILIARY HTR. A/C SYSTEM SCHEMATIC



MODIFIED VEHICLE SCHEMATIC



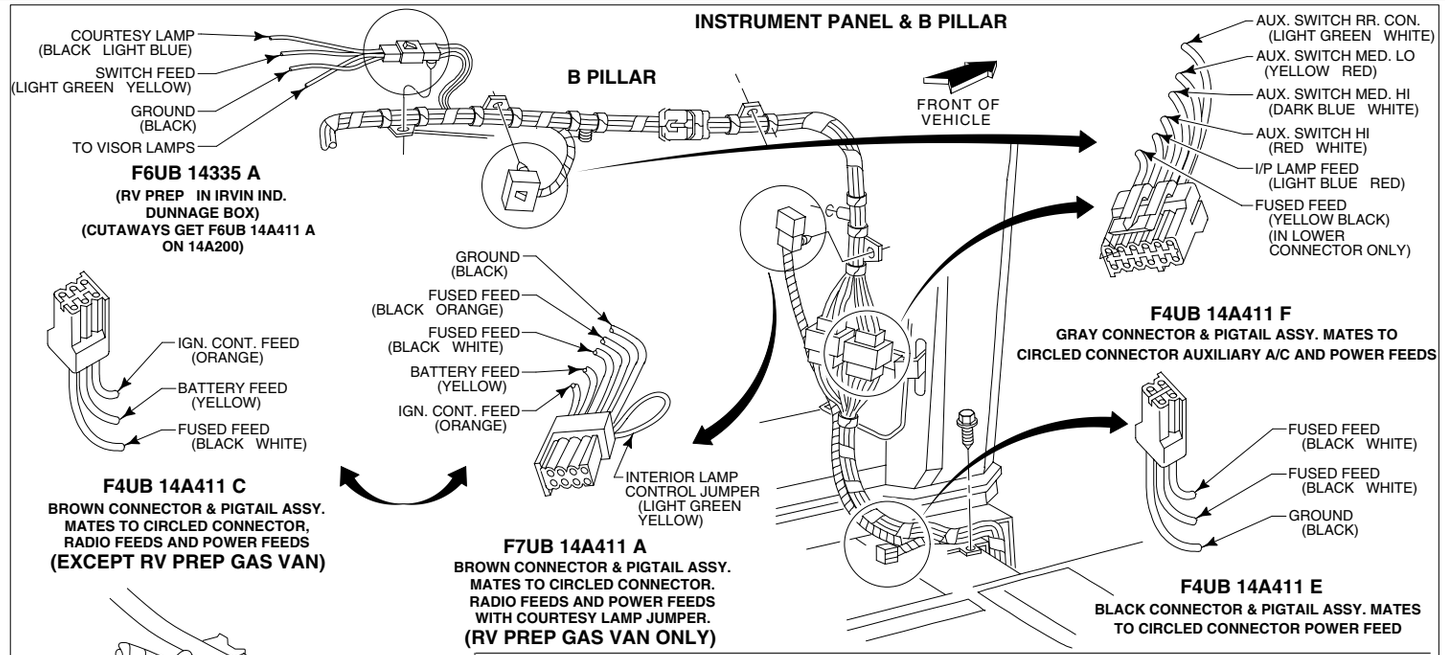
*** NOTE:** TOTAL SHARED CURRENT FOR 37 CIRCUIT NOT TO EXCEED 25 AMPS.

 # NOTE: TOTAL SHARED CURRENT FOR 49 CIRCUIT NOT TO EXCEED 25 AMPS.

@ NOTE: CIRCUITS 867 AND 868 ARE NOT FUSED.

*** * NOTE:** NOT ON VEHICLES WITH DRL'S, CALIFORNIA EMISSIONS OR AUXILIARY BATTERY CIRCUIT #49 IS HOT ALL THE TIME IN THESE VEHICLES.

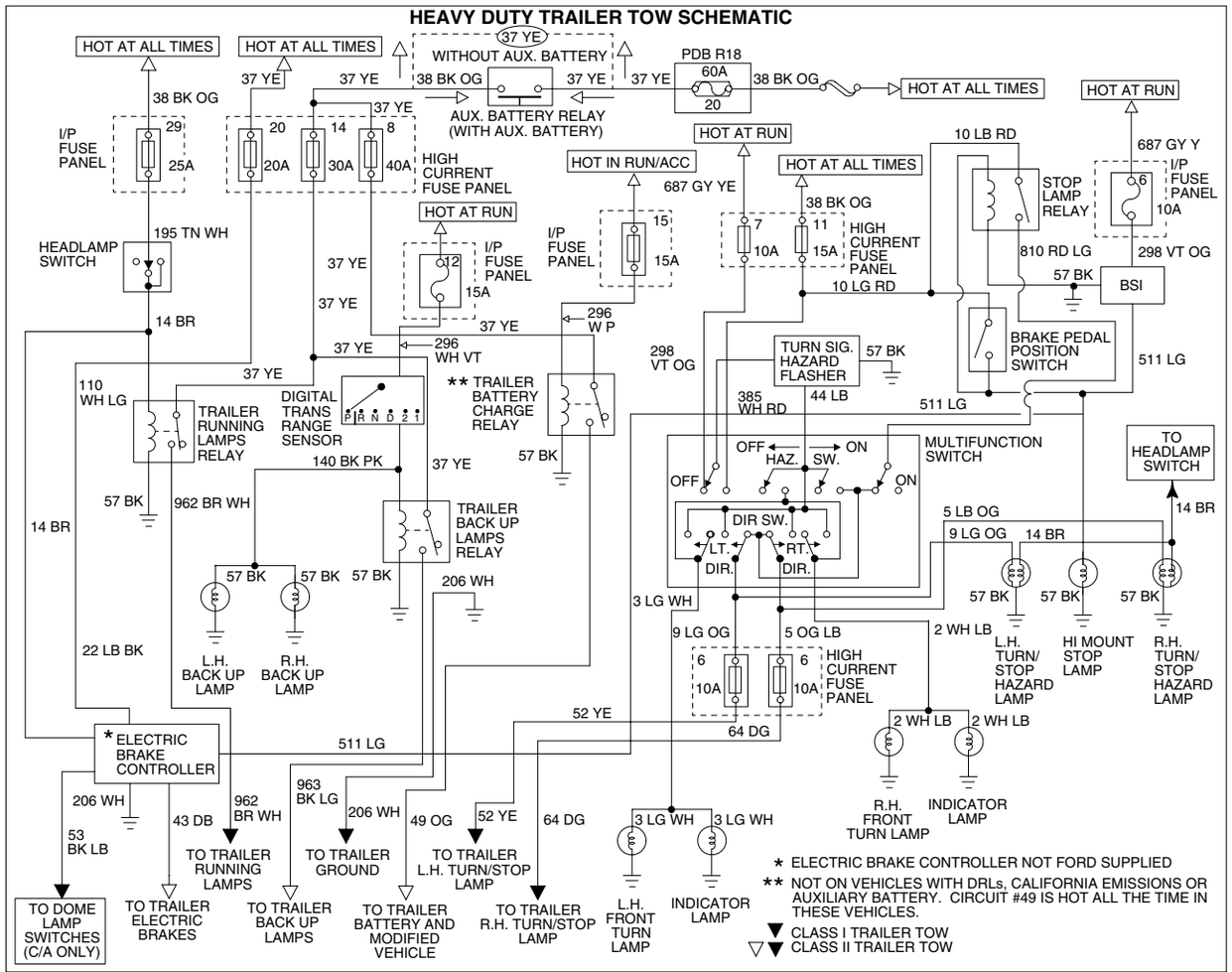
INSTRUMENT PANEL & B PILLAR


COURTESY LAMP (BLACK LIGHT BLUE)
SWITCH FEED (LIGHT GREEN YELLOW)
GROUND (BLACK)
TO VISOR LAMPS
F6UB 14335 A
(RV PREP IN IRVIN IND. DUNNAGE BOX)
(CUTAWAYS GET F6UB 14A411 A ON 14A200)
B PILLAR
FRONT OF VEHICLE
AUX. SWITCH RR. CON. (LIGHT GREEN WHITE)
AUX. SWITCH MED. LO (YELLOW RED)
AUX. SWITCH MED. HI (DARK BLUE WHITE)
AUX. SWITCH HI (RED WHITE)
I/P LAMP FEED (LIGHT BLUE RED)
FUSED FEED (YELLOW BLACK) (IN LOWER CONNECTOR ONLY)
F4UB 14A411 F
GRAY CONNECTOR & PIGTAIL ASSY. MATES TO CIRCLED CONNECTOR AUXILIARY A/C AND POWER FEEDS
GROUND (BLACK)
FUSED FEED (BLACK ORANGE)
FUSED FEED (BLACK WHITE)
BATTERY FEED (YELLOW)
IGN. CONT. FEED (ORANGE)
IGN. CONT. FEED (ORANGE)
BATTERY FEED (YELLOW)
FUSED FEED (BLACK WHITE)
F4UB 14A411 C
BROWN CONNECTOR & PIGTAIL ASSY. MATES TO CIRCLED CONNECTOR, RADIO FEEDS AND POWER FEEDS
(EXCEPT RV PREP GAS VAN)
INTERIOR LAMP CONTROL JUMPER (LIGHT GREEN YELLOW)
F7UB 14A411 A
BROWN CONNECTOR & PIGTAIL ASSY. MATES TO CIRCLED CONNECTOR. RADIO FEEDS AND POWER FEEDS WITH COURTESY LAMP JUMPER.
(RV PREP GAS VAN ONLY)
FUSED FEED (BLACK WHITE)
FUSED FEED (BLACK WHITE)
GROUND (BLACK)
F4UB 14A411 E
BLACK CONNECTOR & PIGTAIL ASSY. MATES TO CIRCLED CONNECTOR POWER FEED
FRONT OF VEHICLE
REAR VIEW OF INSTRUMENT PANEL
PASS THRU TO ENG. (DARK BLUE)
BATTERY FEED (YELLOW)
IGN. CONT. FEED (ORANGE)
PASS THRU TO ENG. (GREY RED)
LH TURN SIGNAL FEED (LIGHT GREEN WHITE)
RH TURN SIGANL FEED (WHITE LIGHT BLUE)
F7UB 14A411 B
BROWN CONNECTOR & PIGTAIL ASSY. MATES TO CIRCLED CONNECTOR UNDER DASH

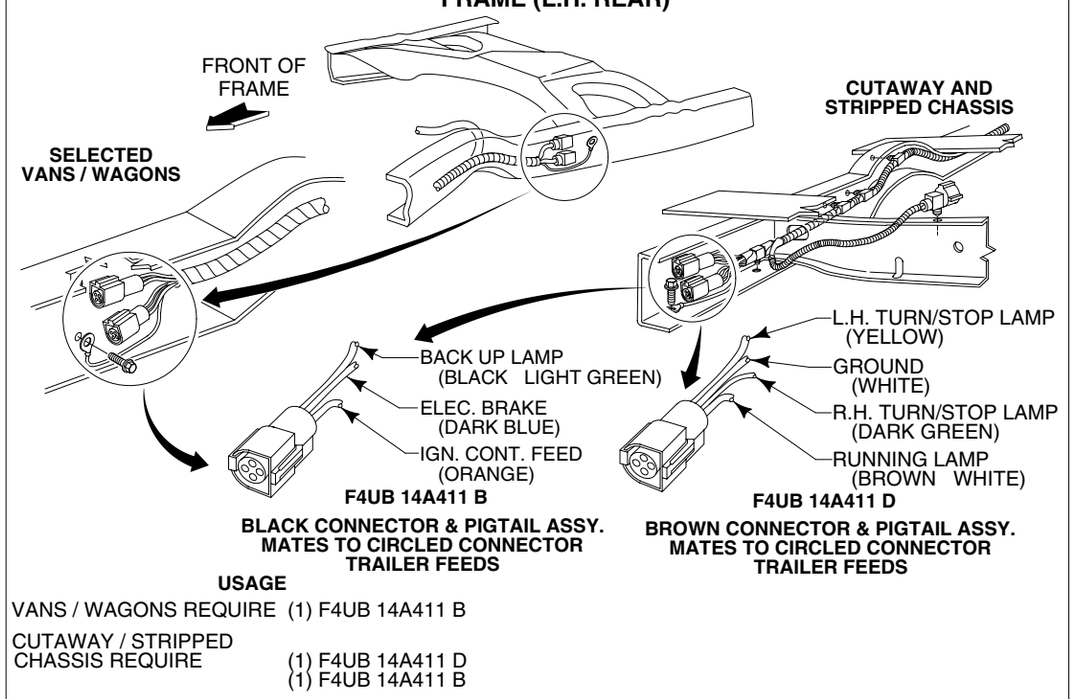
	LOAD NAME	CRCT NUM	WIRE GAGE	CRCT CLR	RECOMMENDED WIRE LENGTH (in feet) W/O ADDITIONAL FUSING							
					MAX CONT. CURRENT	CONT. LOAD 20 GA.	CONT. LOAD 18 GA.	CONT. LOAD 16 GA.	CONT. LOAD 14 GA.	CONT. LOAD 12 GA.	CONT. LOAD 10 GA.	CONT. LOAD 8 GA.
F7UB-14A411-A	BATTERY FEED	*37	12	YE	25 AMP					20	32	51
	IGN. CONTROL FEED*	#49	12	OG	25 AMP					91	141	230
	FUSED FEED	517	12	BK-WH	25 AMP					93	150	237
	GROUND (BLACK) FUSED FEED	38	12	BK BK-OG	24 AMP					93	150	237
	JUMPER	54	18	LG-YE			48	73	118			
F7UB-14A411-B	BATTERY FEED	*37	10	YE	25 AMP					26	42	66
	IGN. CONTROL FEED*	#49	12	OG	25 AMP					93	148	23
	PASS THRU (ENG.)	867	12	DB	25 AMP							
	PASS THRU (ENG.)	868	12	GY-RD	25 AMP							
	LH TURN SIG. FEED			LG-WH								
	RH TURN SIG. FEED			WH-LB								
F7UB-14A411-C	BATTERY FEED	*37	12	YE	10 AMP					20	32	51
	IGN. CONTROL FEED	#49	12	OG	5 AMP					91	146	230
	FUSED FEED	517	12	BK-WH	24 AMP					93	150	237
F7UB-14A411-E	FUSED FEED	517	12	BK-WH	24 AMP					15	25	35
	FUSED FEED	517A	14	BK-WH	8 AMP				40	50	50	
	GROUND	57	14	BK						15	25	35
F7UB-14A411-F	I/P	19	20	LB-RD	8 AMP	50	50	50				
	FUSED FEED	884	10	YE-BK	10 AMP	(HOT IN LOWER CONNECTOR ONLY)					30	45
	AUX. SW. HI	757	18	RD-WH	8 AMP	(CIRCUIT TO BE USED FOR RELAY GROUND RETURN ONLY)						
	AUX. SW. RR. CON			LG-WH								
	AUX. SW. MED. LO			YE-RD								
	AUX. SW. MED. HI			DB-WH								

E-SERIES TRAILER LAMP PLUG AND WIRING

HEAVY DUTY TRAILER TOW SCHEMATIC



FRAME (L.H. REAR)


FRONT OF FRAME
SELECTED VANS / WAGONS
CUTAWAY AND STRIPPED CHASSIS
BACK UP LAMP (BLACK LIGHT GREEN)
ELEC. BRAKE (DARK BLUE)
IGN. CONT. FEED (ORANGE)
L.H. TURN/STOP LAMP (YELLOW)
GROUND (WHITE)
R.H. TURN/STOP LAMP (DARK GREEN)
RUNNING LAMP (BROWN WHITE)

F4UB 14A411 B

BLACK CONNECTOR & PIGTAIL ASSY. MATES TO CIRCLED CONNECTOR TRAILER FEEDS

F4UB 14A411 D

BROWN CONNECTOR & PIGTAIL ASSY. MATES TO CIRCLED CONNECTOR TRAILER FEEDS

USAGE

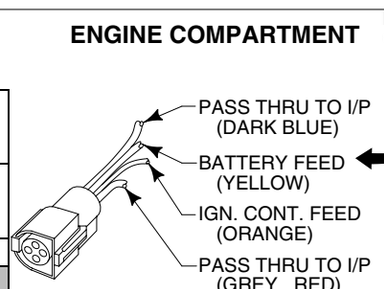
VANS / WAGONS REQUIRE (1) F4UB 14A411 B

CUTAWAY / STRIPPED CHASSIS REQUIRE (1) F4UB 14A411 D
(1) F4UB 14A411 B

LOAD NAME	CRCT NUM	WIRE GAGE	CRCT CLR	MAX CONT. CURRENT	CONT. LOAD 18 GA.	CONT. LOAD 16 GA.	CONT. LOAD 14 GAL.	CONT. LOAD 12 GAL	CONT. LOAD 10 GAL	CONT. LOAD 8 GAL
IGN. CONTROL FEED	#49	12	OG	25 AMP				14	23	36
LH TURN ST. LP.	52	14	YE	8 AMP	86	129	210			
TURN ST. LP.	64	14	DG	8 AMP	86	129	210			
RUNNING LP.	962	12	BR-WH	18 AMP			16	26	41	65
BACK-UP LAMP	963	12	RD-YE	18 AMP				34	55	86

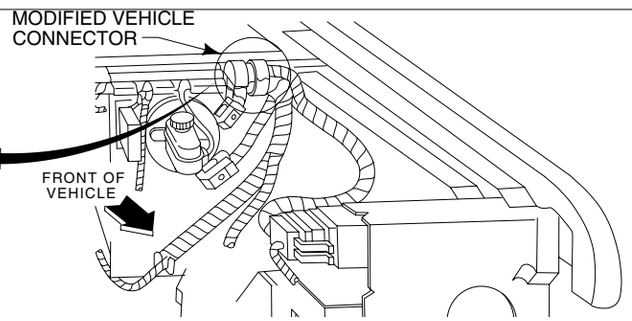
ENGINE COMPARTMENT

LOAD NAME	CRCT NUM	WIRE GAGE	CRCT CLR	RECOMMENDED WIRE LENGTH (in feet) W/O ADDITIONAL FUSING				
				MAX CONT. CURRENT	CONT. LOAD 14 GAL.	CONT. LOAD 12 GAL	CONT. LOAD 10 GAL	CONT. LOAD 8 GAL
IGN. CONTROL FEED	#49	12	OG	25 AMP		95	152	240
PASS THRU (I/P)	867	12	DB	25 AMP				
PASS THRU (I/P)	868	12	GY-RD	25 AMP				
BATTERY FEED	#37	10	YE	25 AMP		28	45	71



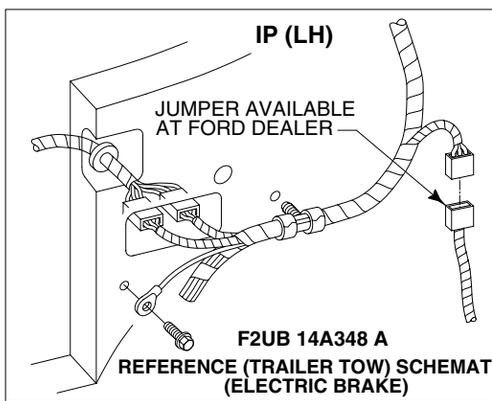
F4UB 14A411 A

BLACK CONNECTOR & PIGTAIL ASSY. MATES TO CIRCLED CONNECTOR ENGINE COMPARTMENT



VIEW OF FRONT END ENGINE COMPARTMENT (L.H. SIDE)

IP (LH)



F2UB 14A348 A

REFERENCE (TRAILER TOW) SCHEMATIC (ELECTRIC BRAKE)